

AMENDMENTS TO THE CLAIMS

1. – 54. (Cancelled)

55. (Currently amended) A method for generating an improved composition of contiguous overlapping peptide fragments (COPs) for a selected polypeptide allergen comprising the steps of:

- (1) determining candidate contiguous overlapping peptides by a method comprising:
 - (a) conducting a structural analysis of the selected polypeptide allergen;
 - (b) selecting one or more separation sites to provide contiguous overlapping peptide fragments greater than 30 peptides in length which are linear and which peptides overlap each separation site; and
- (2) producing said candidate contiguous overlapping peptide fragments; and
- (3) screening said candidate COPs by the steps of:
 - (a) selecting COPs characterized by having a T cell stimulating activity for T cells specific for the selected polypeptide allergen which is greater than a selected minimum by contacting said COPs with T cells specific for the selected polypeptide allergen and detecting said T cell stimulating activity; and
 - (b) selecting COPs characterized by having an IgE binding activity for IgEs ~~IgE's~~ reactive with the selected polypeptide allergen which is less than a selected maximum by contacting said COPs with IgEs reactive with said

selected polypeptide allergen and detecting said IgE binding activity either *in vitro* or *in vivo* by skin reaction test.

56. (Currently amended) The method of claim 55 in which the COPs have relatively reduced levels of IgE binding activity but conserved T cell stimulating activities relative to the IgE binding and T cell stimulating activities of the allergen-holo~~protein~~.

57. (Previously Presented) The method of claim 55 wherein the peptides overlap each separation site by 10 to 15 amino acid residues.

58. (Previously Presented) The method of claim 55 wherein said COPs have a T cell stimulating index which is greater than 2.

59. (Currently amended) The method of claim 55 wherein said COPs are useful in inducing tolerance to said polypeptide allergen.

60. (Previously Presented) The method of claim 59 wherein the COPs are useful in desensitization immunotherapy.

61. (Currently amended) The method of claim 55 in which the IgE binding activity *in vitro* is measured by immunoblotting.

62. (Previously Presented) The method of claim 61 wherein the immunoblot is a dot blot.

63. (Currently amended) The method of claim 55 wherein the IgE binding activity is measured *in vivo* by skin reaction on a dermal test.

64. (Previously Presented) The method of claim 63 wherein the dermal test is selected from the group consisting of skin prick tests and intradermal tests.

65. (Previously Presented) The method of claim 64 wherein the dermal test is an immediate intradermal (ID) test wherein COPs are selected which have a wheal and flare reaction less than or equal to 5 mm at a peptide concentration of greater than 0.1 $\mu\text{g/ml}$.

66. – 70. (Cancelled).